

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS: William Bell §
Steven Dietz §
§ GROUP ART UNIT: 1711
SERIAL NO.: 09/933,521 §
FILED: August 20, 2001 §
§
FOR: Mesoporous Carbons and Polymers

AFFIDAVIT OF STEVEN DIETZ

Our File Number: 1867-00202
Date: December 26, 2002

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

I, Steven Dietz, state as follows:

1. I am over 18 years of age and competent to make this Affidavit.
2. I have been employed by the assignee of this invention since August 1993.
3. My current job title is Senior Chemist.
4. I have a BS and a Ph.D. in chemistry.
5. I am an expert in the field of mesoporous carbon polymers.
6. It is well known that capacitances (F/g or F/cc) are generally lower in non-aqueous electrolytes than they are in aqueous electrolytes, *See Eisenmann, E.T. (1995). Design Rules and Reality Check for Carbon-Based Ultracapacitors*, NTIS No. DE95010575/HDM. Springfield, VA: NTIS., a copy of which is attached for the Examiner's convenience.
7. I am familiar with the teachings of Firsich as they relate to mesoporous carbons. Firsich's carbons do not have volumetric capacitances of at least 20 F/cc in non-aqueous electrolytes.
8. I am familiar with the teachings of Droege as they relate to mesoporous carbons. Droege's polymers do not have volumetric capacitances of at least 20 F/cc in non-aqueous electrolytes.
9. Likewise, I am familiar with the teachings of Tan, as they relate to mesoporous carbons. While US Patent No. 5,925,408 does not disclose what type of electrolyte was used by Tan, the

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following abstract, Tan, M. (1996), *Meeting Abstracts Vol. 96-2, Fall Meeting of the Electrochemical Society*, San Antonio, TX, Oct 6-11, 850 indicates that Tan's materials were tested solely in aqueous electrolyte. A copy of that document is attached for the Examiner's convenience. Tan's polymers also do not have volumetric capacitances of at least 20 F/cc in non-aqueous electrolytes.

10. Hence, none of the cited references discloses a mesoporous carbon polymer having a volumetric capacitance in a non-aqueous electrolyte as high as that presently claimed.

11. I further declare that all statements made herein of my knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under § 1001 of Title 18 of the United States Code and may jeopardize the validity of the application or any patent issued thereon.

Date: 12-26-02

Steven Dief
Name